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# **NASA Academic Mission Services (NAMS) RFP NNA14488849R**

**Industry Day  
March 19, 2014**





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# Agenda

|          |                                  |   |
|----------|----------------------------------|---|
| 8:30 AM  | Registration                     | Attendees   |
| 9:00 AM  | Welcome & Introduction           | Jeremy Messer, Contracting Officer                            |
| 9:05 AM  | Overview of Ames                 | Dr. Steven Zornetzer,<br>Associate Center Director, Technical |
| 9:35 AM  | Procurement Information          | Jeremy Messer   |
| 10:00 AM | NAMS Technical Requirements      | Karen Cate,<br>Chair, Source Evaluation Board                 |
| 10:30 AM | Break/ Submit Questions          |   |
| 11:15 AM | Questions Due, Q&A if Applicable | Attendees   |
| 11:30 AM | Close                            |   |



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# Purpose

This Industry Day is intended to:

- (1) Familiarize participants with the NAMS requirements;
- (2) Present the current status of the NAMS acquisition;
- (3) Permit potential offerors an opportunity to network and discuss teaming or subcontracting arrangements;
- (4) Allow potential offerors an opportunity to submit questions and provide comments regarding the recently posted draft Request for Proposal; and
- (5) Allow industry representatives an opportunity to provide input to the Government via one-on-one meetings.





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# General Guidance

- These slides are not to be interpreted as a comprehensive description of the NAMS requirements. Please refer to the draft Statement of Work and draft Request for Proposal.
- To the extent there are any inconsistencies between this briefing and the final solicitation, the final solicitation governs.
- Nothing said here today should be construed as a revision unless subsequently confirmed in the Final RFP.



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# General Guidance

- A communications blackout will be invoked following issuance of the final RFP.
- All communications with industry concerning this acquisition will then be with the Contracting Officer only.
- The “blackout” period for communication with industry will continue until contract award.



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# Questions

- Following the presentation, all questions must be presented in writing. At this time, the Government will not verbally entertain any questions. All questions will be answered in a timely manner. Questions and answers will be made available on the Federal Business Opportunities website.
- There are Question Forms (3x5 cards) at the sign-in table that may be used to write your questions.
- Questions and comments help strengthen and clarify the solicitation package. The Government values your feedback!
- All questions related to the Draft RFP, or this Industry Day shall be submitted in writing no later than March 31, 2014 to:

[Jeremy.r.messer@nasa.gov](mailto:Jeremy.r.messer@nasa.gov)



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## Electronic Files

- Link to NAMS updates on NASA/ARC Business Opportunities Page:  
<https://prod.nais.nasa.gov/cgi-bin/eps/bizops.cgi?gr=D&pin=21>
- The solicitation and any documents related to NNA14488849R, including Interested Parties list, are available at the above website.
- These charts and the Industry Day Attendance List will be posted to the above website.



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## E-Mail Notification

- E-mail notification Tab on NASA/ARC Business Opportunities Page
  - <http://prod.nais.nasa.gov/cgi-bin/nens/index.cgi>
- Receive notification based on:
  - NASA Center
  - Specific acquisition number
  - Product or Service Code





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# Freedom of Information Act (FOIA) Requests

- Direct FOIA requests electronically to:

[foia@arc.nasa.gov](mailto:foia@arc.nasa.gov)

- No proprietary information can be disclosed
- URL to NASA ARC FOIA Webpage and Electronic Reading Room:

<http://www.nasa.gov/centers/ames/business/foia/index.html>



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# Welcome and Center Overview

Dr. Steven Zornetzer

Associate Center Director - Technical



# Aeronautics Strategic Vision

*NASA's Aeronautics Research Mission Directorate(ARMD) is responsible for developing tools and technologies to improve the efficiency, safety and adaptability of air transportation. ARMD guides its research efforts using a new strategic vision.*

## Six NASA ARMD Research Thrusts are defined:

- **Safe, efficient growth in global operations**
- Innovation in commercial supersonic aircraft
- Ultra-efficient commercial transports
- Transition to low-carbon propulsion
- **Real-time, system-wide safety assurance**
- **Assured autonomy for aviation transformation**

The primary focus for Ames Aeronautics are elements 1,5 and 6 (in bold).





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## NAMS Brief Description

- The NASA Academic Mission Services (NAMS) Contract will provide ARC with capabilities to fulfill mission requirements from fundamental research and development through field-test deployments and operational science missions. This Contract will provide academic or university-based program and project support for science and engineering teams at the Center.





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# NAMS Procurement Information

- Other Than Full and Open Competition – Limited to domestic degree-granting universities, university systems, and non-profit organizations
- Contract Type: Hybrid contract consisting of a definitive Core requirement (Cost Plus Fixed Fee (CPFF)) with an IDIQ component (CPFF)
  - The Core is the known minimum support needed in the next five years of contract performance, and encompasses requirements for Code A (Aeronautics) as well as the overall management of the contract (Core and IDIQ)
  - The IDIQ work includes the functionalities and capabilities as described in the SOW. The task orders will address currently unknown, but expected, requirements. The IDIQ task orders will be issued to supplement support provided under the Core, and they will address complex and dynamic research and development requirements that span across several integrally-related technical areas.
- Task Order type: Performance Based CPFF



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## NAMS Procurement Information (cont'd)

- NAICS Code: 541712: Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology)
  - Size Standard: 500 employees
- Five-year performance period consisting of a two-year Base, one two-year Option, and one one-year Option

A 30-day Phase-in Period will be included in the Base period

- Place of Performance:

The majority of the work will be performed on-site at NASA Ames, but the multidisciplinary nature of the work will require occasional support to be provided at other NASA Centers, principal investigator laboratories, and at such other locations as directed by the Contracting Officer.



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# Weighting and Scoring

- The solicitation evaluation factors will include: Mission Suitability, Past Performance, and Cost. Mission Suitability is more important than Past Performance. Past Performance is more important to Cost. Mission Suitability and Past Performance when combined are significantly more important than Cost.
- Mission Suitability subfactors will be assigned adjectival ratings and numerical scores in accordance with the numerical system established in the Final RFP. The overall Mission Suitability Factor will only receive a numerical score.
- The other factors (i.e., Past Performance and Cost/Price) are not similarly weighted or scored. Past Performance is assigned a level of confidence rating in accordance with the criteria set forth in the final RFP
- A cost realism analysis will be performed to assess the reasonableness and realism of the proposed costs. It is not numerically scored.



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# Award Without Discussions

- FAR 52.215-1 and NFS 1815.209 allow for award without discussions.
- The Government may award a contract based solely on the initial offers received, without discussion of such offers.
- The Government reserves the right to hold discussions if Award on the basis of initial offers is determined not to be in the Government's best interest.





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# Proposal Preparation

- Proposals should be prepared in accordance with the Final RFP and written amendments, if any.
- Ensure that all amendments are acknowledged with proposal submission.
- Evaluation of proposals will be in accordance with the Final RFP.



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# Acquisition Background: Small Business Goals

- All Offerors must complete the portion of the instructions specific to the Small Business Subcontracting Plan.
- All Offerors are required to respond to the Commitment to the Small Business Program.
- The small business goals for this procurement are as follows:
  - Overall Small Business Goal: 23%
  - Small Disadvantaged Business (SDB) Concerns 5%
  - Women Owned Small Business (WOSB) Concerns 5%
  - Veteran Owned Small Business (VOSB) Concerns 2%
  - Service-Disabled Veteran-Owned Small Business (SDVOSB) Concerns 2%
  - HUBZone (HBZ) Small Business Concerns 1%
  - Historically Black Colleges and Universities (HBCU)/Minority Institution (MI) 2%



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## Estimated Acquisition Milestones

- Draft RFP Released: March 11, 2014
  - Industry Day March 19, 2014
  - Draft RFP Comments Deadline: March 31, 2014
  - Final RFP Release: April 22, 2014
  - Proposal Due: June 08, 2014
- (45 Days after release of RFP)
- Selection: November 2014
  - Award: December 2014



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# NAMS Technical Requirements





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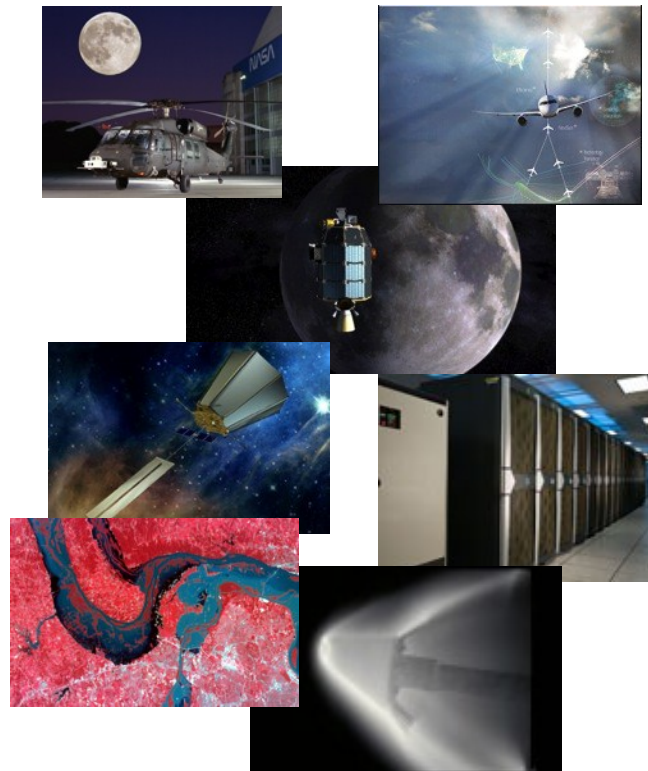


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## Scope of Work

**This procurement is intended to provide basic and applied research support across multiple Ames Research Center (ARC) Directorates including, but not limited to:**

Aeronautics Directorate (Code A)  
Office of the Center Director (Code D)  
Information Technology Directorate (Code I)  
Programs and Projects Directorate (Code P)  
Engineering Directorate (Code R)  
Science Directorate (Code S)  
Exploration Technology Directorate (Code T)  
Aeroflightdynamics Directorate (Code Y)





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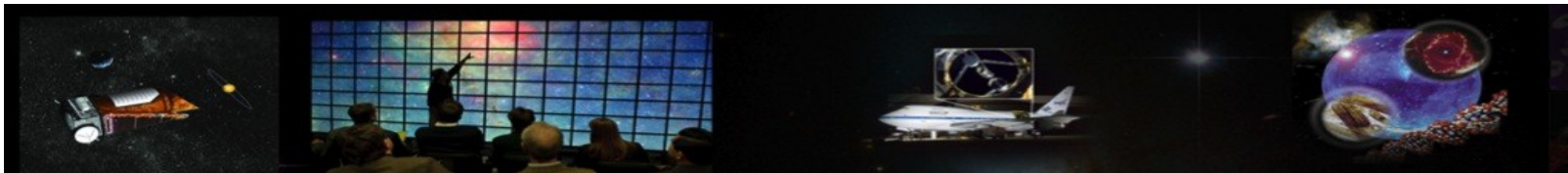


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## Scope of Work

**OBJECTIVE: Obtain basic and applied research support services for a sustained capability for Ames encompassing all phases of research and technology development.**

**The contract is intended to serve agency and national goals by strengthening NASA Ames' ability to develop mutually beneficial research partnerships and consortia with academia.**





**For NAMS, the Core work will be composed of known tasks specified from the Aeronautics Directorate**

## Core tasks

Research Support for Aviation Systems Division

- **Airspace Operations and Safety**
- **Unmanned Aircraft Systems in the NAS**

## IDIQ tasks

- Anticipated in some or all of the organizations specified in the Statement of Work.
- Performance may include functions and capabilities as described for Core tasks.
- Negotiated and issued as a change in the magnitude of requirements over those of established Core tasks.





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## Place of Performance:

Majority of the work will be performed on-site at Ames

- **Support will be required at the NASA/FAA North Texas Research Station in Fort Worth, Texas.**

The nature of the work will require occasional performance at additional NASA Centers, Principal Investigator laboratories, and at other locations to be specified by the Contracting Officer.







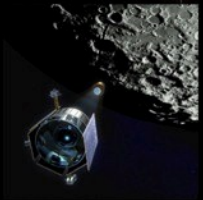
# Scope of Work: Broad Center Support

*The following items are required by all organizations utilizing the NAMS contract:*

**The primary role of NAMS is enabling the engagement of qualified professionals and students in the areas of:**

- Fundamental concept development
- Experimental support
- Product development
- Data analysis
- Knowledge dissemination

**Individual Core and IDIQ elements may involve support to unique facilities, databases, software, and hardware. Such support can require adherence to specialized policies and procedures, as indicated where appropriate.**



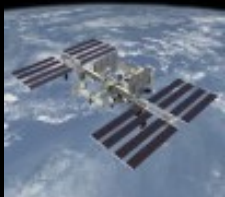
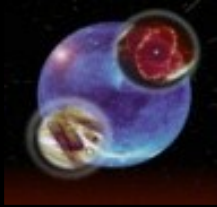


## General Technical Requirements Draft SOW 3.2

*The following elements are required in performance of the NAMS contract:*

### **Academic Collaboration:**

- Provide access to University research talent at all levels to advance NASA's mission
- Engage a broad base of expertise external to the Contractor organization, leveraging partnerships, and proactively seeking out collaborations in order to fill disciplinary gaps
- Incorporate students and laboratories from a range of academic areas
- Support visiting professors/early career/students





## General Technical Requirements (cont.)

### Draft SOW 3.2

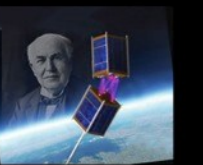
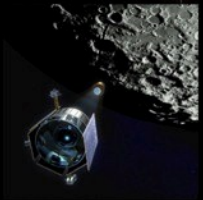
***The following elements are required in performance of the NAMS contract:***

#### **Knowledge Dissemination:**

- Prepare stand alone publications, presentations, credentials, recognitions as required including presentation and participation in technical meetings and conferences
- Support transfer of technology to external Government agencies and commercial partners
- Publish conference proceedings, refereed professional journals, NASA technical publications, and other materials, as appropriate
- Support demonstrations and presentations of results and tools
- Support development of teaching/tutorial/exhibit material for research and development products and capabilities developed by NASA

#### **Travel:**

- Travel as required to support research, development, laboratory or field experiments, and dissemination/presentation of research results including off-site assignments







# Aeronautics

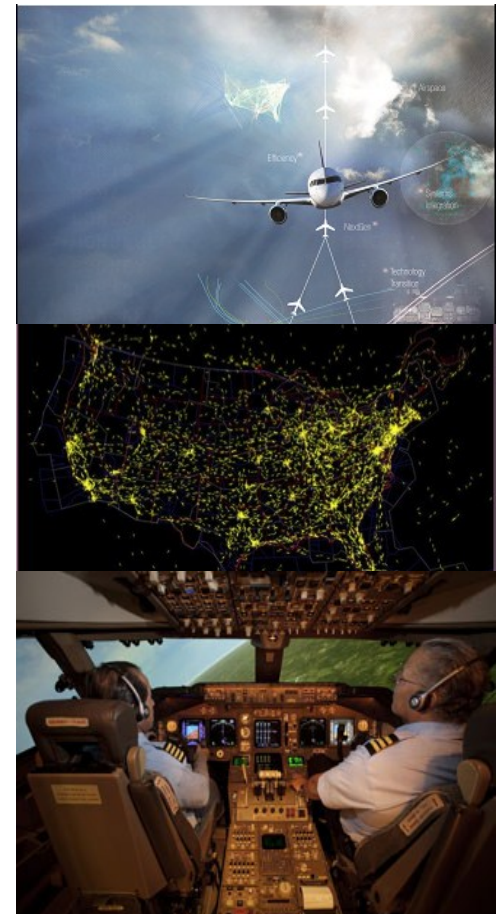
## Draft SOW 3.3.1

*The **Aeronautics Directorate** conducts research to improve the safety and efficiency of aircraft and Air Traffic Management Systems. The Directorate develops and supports revolutionary aircraft technologies from concept to deployment in the National Airspace System.*

The primary role of NAMS in this area is to support fundamental research in Air Traffic Management (ATM), Unmanned Aircraft Systems (UAS), and Aero-acoustics. Specific instances include:

- Collaborative research to conceive, analyze and validate ATM automation concepts
- Software Development for existing and novel software systems
- Evaluating implications and broad effects of new ATM and UAV concepts using sophisticated simulation systems
- Data acquisition, concept development and analysis, software verification, human-in-the-loop experiments, and post-experiment analysis and documentation
- Facilities and hardware support and maintenance

**Work may be performed at remote locations.**





## Information Technology, Engineering, Programs and Projects Draft SOW 3.3.2-4

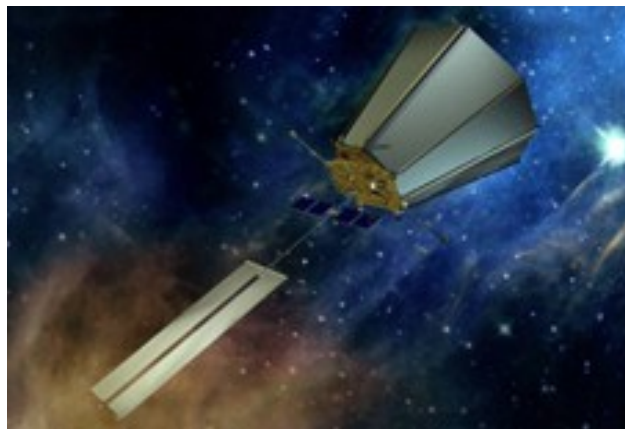
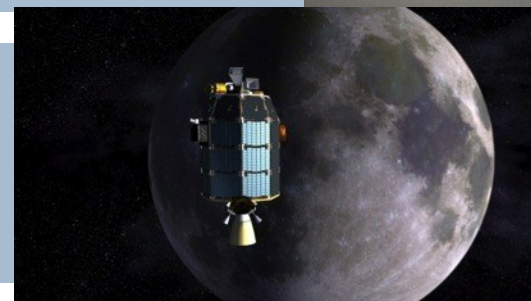


**For the Information Technology Directorate**, NAMS may support projects to include:

- Product & Services Integration Development Division (Code ID)
- Information Technology (IT) Operations Division (Code IO)
- External Projects Division (Code IQ)
- IT Security Division (Code IS)



**For the Engineering Directorate**, NAMS may provide fundamental concept studies, analytical evaluations and assessments, necessary experimental support, and present, publish, and recommend solutions to emerging engineering and technology challenges.



**For the Programs and Projects Directorate**, NAMS may support advanced concept definition and proposal development and can provide experimental support on systems studies relating to technical and scientific concepts, flights, and missions to determine feasibility, cost, and risk. NAMS may also provide expert professionals capable of managing agency interfaces on selected efforts.

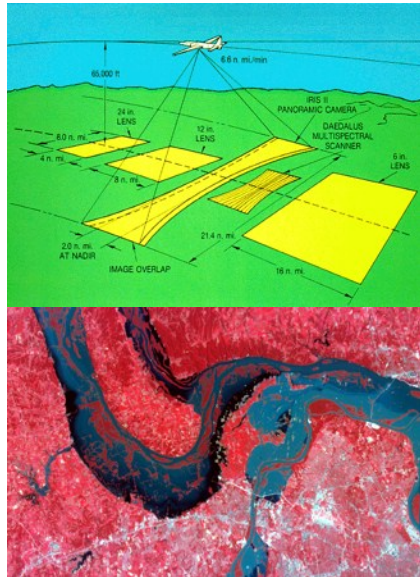




# Science

## Draft SOW 3.3.5

**Ames' *Science Directorate*** conducts basic and applied research in Earth, Space Bioscience, Space Science and Astrobiology. Space Bioscience research for human space travel including health monitoring and synthetic biology applications. Earth science research includes atmospheric chemistry and physics, biospheric science focused on terrestrial and aquatic processes, and ecosystem studies.



**The primary role of NAMS in this area is to support basic and applied research in numerous areas, including:**

- Research into technologies for long-term human space flight including synthetic biology
- Small satellite instrumentation design and implementation for Earth observations
- Education and public outreach





## Exploration Technology Draft SOW 3.3.6

*The mission of Ames' **Exploration Technology Directorate** is to be world-class creators and facilitators of innovative, intelligent, high-performance and reliable exploration technologies that will enable current and future NASA missions.*

**The primary role of NAMS in this area is to support basic and applied research in numerous areas, including:**

- Autonomous systems and robotics
- Collaborative assistant systems
- Robust software engineering
- Health monitoring/management and discovery through advanced data mining
- Human information processing, human-automation integration, system safety
- Reacting flow environments, thermo-physics, thermal protection materials and systems
- Advanced sensors and materials
- Supercomputing applications and engineering
- Physics simulation and modeling

**The Exploration Technology Directorate actively contributes to numerous programs in all four NASA Mission Directorates.**





# Aeroflightdynamics

## Draft SOW 3.3.7

***The AeroflightDynamics Directorate advances knowledge and innovative technology in rotorcraft aeromechanics and human-system integration.***



**The primary role of NAMS in this area is to enable the conduct of basic and applied research in rotorcraft aeromechanics by providing expertise supporting analytical, computational and experimental research. Work will include:**

- Design and development of software for flight control systems, particularly rotorcraft
- Support for obstacle field navigation research
- Support to experimental aerodynamics research in the Army 7- by 10-Foot Wind Tunnel at ARC and at other facilities
- Fundamental research into the design and testing of human interface systems, particularly with respect to fixed wing and rotorcraft UAS



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## Conclusion

- Break
- Room is available for discussions among interested parties
- Written questions are due by 11:15
- One-on-one meetings will begin at 1:00 p.m. in this room
- Thank you!